IN THE CLAIMS

Claims 1-21 (Canceled).

22. (New) A packet voice processing circuit comprising:

an interface for receiving voice data packets via a packet network, each of the voice data packets comprising digital voice data and a group identifier;

a queue for storing the digital voice data;

a processor for detecting a change in the group identifier; and

the processor changing the processing of digital voice data, if a change in group identifier is detected.

the processor continuing prior processing of digital voice data, otherwise.

23. (New) The circuit of claim 22 wherein the packet network is a wired network.

24. (New) The circuit of claim 23 wherein the wired network comprises an Ethernet compatible network.

25. (New) The circuit of claim 22 wherein the packet network is a wireless network.

26. (New) The circuit of claim 25 wherein the wireless network communicates at approximately 2.4 GHz.

27. (New) The circuit of claim 25 wherein the wireless network communicates using a frequency hopping spread spectrum technique.

28. (New) The circuit of claim 25 wherein the wireless network communicates using a direct sequence spread spectrum technique.

29. (New) The circuit of claim 22 wherein the packet network uses an Internet protocol (IP).

30. (New) The circuit of claim 29 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

31. (New) The circuit of claim 22 wherein changing the processing of digital voice data comprises delaying the conversion of queued digital voice data by an adjustable queuing time.

32. (New) The circuit of claim 31 wherein the adjustable queuing time is a function of a propagation delay of the packet network.

33. (New) The circuit of claim 31 wherein the adjustable queuing time is initialized to a predefined value.

34. (New) The circuit of claim 33 wherein the predefined value is approximately 200 milliseconds.

35. (New) The circuit of claim 31 wherein the adjustable queuing time is determined using a test packet sent over the packet network.

36. (New) The circuit of claim 35 wherein the test packet is sent prior to establishment of voice communication.

37. (New) The circuit of claim 35 wherein the test packet is interspersed with digital voice data packets.

38. (New) The circuit of claim 22 wherein the group identifier is a pseudo random number.

39. (New) The circuit of claim 22 further comprising a converter for converting digital voice data to an analog voice stream.

40. (New) A packet voice processing circuit comprising:

a processor for processing digital voice data to detect a lack of voice activity for a minimum period of time;

an interface for transmitting voice data packets via a packet network, each of the voice data packets comprising digital voice data and a group identifier;

the processor changing the group identifier if a lack of voice activity for a minimum period of time is detected; and

the processor leaving the group identifier unchanged, otherwise.

41. (New) The circuit of claim 40 wherein the packet network is a wired network.

42. (New) The circuit of claim 41 wherein the wired network comprises an Ethernet compatible network.

43. (New) The circuit of claim 40 wherein the packet network is a wireless network.

44. (New) The circuit of claim 43 wherein the wireless network communicates at approximately 2.4 GHz.

45. (New) The circuit of claim 43 wherein the wireless network communicates using a frequency hopping spread spectrum technique.

46. (New) The circuit of claim 43 wherein the wireless network communicates using a direct sequence spread spectrum technique.

47. (New) The circuit of claim 40 wherein the packet network uses an Internet protocol (IP).

48. (New) The circuit of claim 47 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

49. (New) The circuit of claim 40 wherein the minimum period of time is approximately 1 (one) second.

50. (New) The circuit of claim 40 wherein the group identifier is a pseudo-random number.

51. (New) The circuit of claim 40 further comprising a converter for converting an analog voice stream to digital voice data.

52. (New) A method of processing voice for communication over a packet network, the method comprising:

receiving digital voice data packets communicated via the packet network, each of the digital voice data packets comprising digital voice data and a group identifier;

queuing the digital voice data from the received digital voice data packets;

processing digital voice data to produce a voice stream;

monitoring the received digital voice data packets to detect a change in group identifier;

changing the processing of digital voice data, if a change in group identifier is detected; and

continuing prior processing of digital voice data, otherwise.

53. (New) The method of claim 52 wherein the packet network is a wireless network.

54. (New) The method of claim 53 wherein the wireless network communicates at approximately 2.4 GHz.

55. (New) The method of claim 53 wherein the wireless network communicates using a frequency hopping spread spectrum technique.

56. (New) The method of claim 53 wherein the wireless network communicates using a direct sequence spread spectrum technique.

57. (New) The method of claim 52 wherein the packet network uses an Internet protocol (IP).

58. (New) The method of claim 57 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

59. (New) The method of claim 52 wherein changing the processing of the digital voice data comprises delaying for an adjustable queuing time the processing of queued digital voice data to a voice stream.

60. (New) The method of claim 59 wherein the adjustable queuing time is a function of a propagation delay of the packet network.

61. (New) The method of claim 59 wherein the adjustable queuing time is initialized to a predefined value.

62. (New) The method of claim 61 wherein the predefined value is approximately 200 milliseconds.

63. (New) The method of claim 59 wherein the adjustable queuing time is determined using a test packet sent over the packet network.

64. (New) The method of claim 63 wherein the test packet is sent prior to establishment of voice communication.

65. (New) The method of claim 63 wherein the test packet is interspersed with digital voice data packets.

66. (New) The method of claim 52 wherein the group identifier is a pseudo random number.

67. (New) The method of claim 52 wherein the voice stream comprises a digital representation of voice information.

68. (New) A method of processing voice for communication over a packet network, the method comprising:

monitoring digital voice data for a lack of voice activity for a minimum period of time;

assigning a different group identifier to the digital voice data following a lack of voice for the minimum period of time;

packetizing the digital voice data and the group identifier to produce digital voice data packets; and

transmitting the digital voice data packets via the packet network.

69. (New) The method of claim 67 further comprising:

receiving a voice stream; and

digitizing the voice stream to provide digital voice data;

70. (New) The method of claim 68 wherein the packet network is a wireless network.

71. (New) The method of claim 70 wherein the wireless network communicates at approximately 2.4 GHz.

72. (New) The method of claim 70 wherein the wireless network communicates using a frequency hopping spread spectrum technique.

73. (New) The method of claim 70 wherein the wireless network communicates using a direct sequence spread spectrum technique.

74. (New) The method of claim 68 wherein the packet network uses an Internet protocol (IP).

75. (New) The method of claim 74 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

76. (New) The method of claim 68 wherein the minimum period of time is approximately one (1) second.

77. (New) The method of claim 68 wherein the group identifier is a pseudo-random number.

78. (New) The method of claim 68 further comprising compressing the digital voice data.

79. (New) A method of processing voice for communication over a packet network, the method comprising:

monitoring digital voice data to detect a lack of speech for a minimum period of time;

processing the digital voice data and an identifier to produce digital voice packets for transmission via the packet network;

changing the processing of digital voice data and the identifier, if a lack of speech for a minimum period of time is detected; and

continuing prior processing of digital voice data and the identifier, otherwise.

80. (New) The method of claim 79 wherein monitoring comprises identifying at least one difference between speech and background noise.

81. (New) The method of claim 79 wherein the minimum period of time is approximately one (1) second.

82. (New) The method of claim 79 further comprising:

receiving an analog voice stream; and

digitizing the analog voice stream to produce digital voice data.

83. (New) The method of claim 78 wherein the packet network is a wireless network.

84. (New) The method of claim 83 wherein the wireless network communicates at a frequency of approximately 2.4 gigahertz.

85. (New) The method of claim 83 wherein the wireless network communicates using a frequency hopping spread spectrum technique.

86. (New) The method of claim 83 wherein the wireless network communicates using a direct sequence spread spectrum technique.

87. (New) The method of claim 79 wherein the packet network comprises a wired network.

88. (New) The method of claim 79 wherein the packet network comprises an Ethernet compatible network.

89. (New) The method of claim 79 wherein the packet network uses an Internet protocol (IP).

90. (New) The method of claim 89 wherein the Internet protocol is the transmission control protocol (TCP)/Internet protocol (IP).

91. (New) The method of claim 79 wherein the identifier is a group identifier.

92. (New) The method of claim 91 wherein the group identifier is a pseudo-random number.

93. (New) The method of claim 91 wherein changing the processing of digital voice data and the identifier comprises changing the group identifier.